

## **IN THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

### **Listing of Claims**

1. (Currently Amended)                      A recording apparatus of a helical scan type capable of recording data as inclined tracks onto a tape-shaped recording medium, comprising:
- a rotary drum having N recording heads on a circumference thereof;
  - a first series code generating means for generating a first series code by adding a first parity to a first data array in a predetermined direction;
  - a second series code generating means for generating a second series code by adding a second parity to a second data array in a direction orthogonal to said direction of said first data array; and
  - a recording control means for controlling recording such that said first series code is recorded by one of said N recording heads and said second series code is recorded by said N recording heads in a dispersed manner over a plurality of tracks, on said tape-shaped recording medium,
- wherein said second series code generating means generates said second series code such that a ratio between said second parity and said second series code equals at least  $1/N$ ,
- wherein said number N of said recording heads are 4 or more, and
- wherein said first series code is recorded across a plurality of tracks, which are formed by one of said N recording heads.

2. (Canceled)

3. (Canceled)

4. (Currently Amended)                      A recording method for a recording apparatus of a helical scan type which records data as inclined tracks onto a tape-shaped recording medium by N recording heads disposed on a circumference of a rotary drum, said method comprising the steps of:

generating a first series code by adding a first parity to a first data array in a predetermined direction;

generating a second series code such that a ratio between second parity and a second data array equals at least  $1/N$ , wherein said second parity is added to said second data array in a direction orthogonal to said direction of said first data array of said first series code; and

controlling recording such that said first series code is recorded by one of said N recording heads on said tape-shaped recording medium and said second series code is recorded by said N recording heads in a dispersed manner over a plurality of tracks,

wherein said number N of said recording heads are 4 or more, and

wherein said first series code is recorded across a plurality of tracks, which are formed by one of said N recording heads.